Mosquitoes (Diptera, Culcidae) Recorded from Tasmania[1]

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Only 21 species of mosquitoes have previously been recorded from Tasmania; three of these belong to the sub-family Dixinae, the rest to the sub-family Culicinae. No representatives of the sub-family Chaoborinae have as yet been recorded, although it is quite likely that this sub-family will eventually be found on the island.

I have recently been fortunate in having before me for study some 70 specimens of mosquitoes collected in various parts of Tasmania early in 1946 by Miss M. Crust, who, like previous collectors of Tasmanian mosquitoes, was a visitor to the island. This collection added locality records to eight of the species previously recorded, including a rediscovery of a species not recorded since 1856 *(Anopheles annulipes)*, and disclosed two previously unrecorded species *(Aedes notoscriptus* and *Culex fergusoni)*.

In the hope that some resident entomologist may take up the study of local mosquitoes the existing information is summarised below with such additional data as is available from Miss Crust's collection, now in the Macleay Museum at the University of Sydney; from the collection of the Division of Economic Entomology, C.S.I.R., Canberra; and from a small collection recently sent to me by the Director of the Launceston Museum, Mr. N. J. B. Plomley. One of the most obviously fruitful fields for study concerning the mosquitoes of Tasmania is that of the larvae and breeding habits. Of the species enumerated below only eight are known in their larval stages.

The three species of Dixinae recorded from Tasmania are:

Dixa (Paradixa) tasmaniensis Tonnoir,
Dixa (Paradixa) unipunctata Tonnoir, and
Dixa (Nothodixa) geniculata Tonnoir.

All the available information concerning these is to be found in Tonnoir (1924).

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(1) The publication of lists of the Tasmanian fauna and flora is undertaken so as to provide summaries of present knowledge. In many cases such lists will do no more than show how little is known of Tasmanian natural history. It is obvious that the need for biological survey in Tasmania is urgent, particularly in view of the considerable disturbance and destruction of natural areas which has already taken place and is continuing. Moreover, the need is for local workers, not visitors who see the country for only short periods.

It is also essential that this knowledge of Tasmania should be made available in the form of non-technical, but authoritative, handbooks dealing with its arts and sciences. It may confidently be expected that when this information becomes public, not only will the acquisition of further knowledge follow at a greatly increased rate, but there will be an appreciation of what we in Tasmania have inherited. Editor.

Anopheles (Myzomyia) annulipes Walker

This species was originally described from Van Diemen's Land by Walker in 1856. Since that time it has not been recorded again from Tasmania, although it is the dominant species of the genus on the Australian continent and extends into New Guinea. It was most interesting to find it in the present Tasmanian collection, particularly when these specimens were found to be quite typical of the species as found on the Australian mainland. Of the eight specimens before me, all have the patch of white scales on the upper part of the mesepimeron (see Lee and Woodhill, 1944), only two have an entirely black proboscis, four have pale scales on the apical half and two a few pale scales near the middle. This mixture of proboscis forms from so near the type locality (the actual place in Tasmania was not recorded by Walker) adds confirmation to the conclusions regarding the variability of this species detailed previously (Lee and Woodhill, 1944). The specimens before me came from Low Head, 25:i:1946, M. Crust, and Launceston, —:i:1948, F. N. Cartledge.

Tripteroides (Mimeteomyia) tasmaniensis (Strickland)

See Edwards (1924, 1926) and Lee (1946) for description and distribution of this species. An additional record is Low Head, 26:ii:1946.

Theobaldia littleri (Taylor) and T. weindorferi Edwards

These species have both been recorded from Tasmania. See Edwards (1924, 1926) and Lee (1937). An additional record for *T. littleri* is Lake St. Clair, 13:ii:1946.

Aedes (Ochlerotatus) andersoni Edwards

In 1926 Edwards gave this name to the species originally described by Strickland (1911) as *Andersonia tasmaniensis*. In the present collection it was taken at Great Lake, 12:i:1946, and there are specimens in the C.S.I.R. collection from the same locality, —:ii:1934, and Upper Blessington. See Edwards (1926) and Mackerras (1927).

Aedes (Ochlerotatus) camptorhynchus (Thomson)

See Edwards (1924) and Mackerras (1927). Additional records from the present collection are Swansea, 21:iii:1946; St. Helens, 19:iii:1946; Hobart, 31:iii:1946; Launceston, 8:iv:1946, 16:iv:1946, 23:iv:1946 and 25:iv:1946; and Coles Bay, 26:iii:1946 and 23:iv:1946. Specimens in the C.S.I.R. Museum are from Burnie, 24:x:1922 and 1:ii:1923; Ferntree Gully, 25:x:1921; King River 4:ii:1923; Launceston, 7:xi:1923; Sassafras, 22:x:1922 (all A. Tonnoir); Sandford, 1:xi:1942; Fort Direction, 1:xi:1942 (both J. W. Evans).

Aedes (Ochlerotatus) cunabulanus Edwards

See Edwards (1924, 1926) and Mackerras (1927). Taken also at Great Lake, 12:i:1946 and Lake St. Clair, 8:ii:1946. Also present in the C.S.I.R. collection from Upper Blessington.

I have also received a series of specimens in spirit which I feel certain are *A. cunabulanus* (Great Lake, 10:xii:1947, F. Worsnop). These are remarkable for their heavy infestation with mites. Up to 16 or more may be present on the abdomen of a single mosquito, the head being inserted usually in the dorsal or ventral intersegmental membrane of the host, but where the infestation is heavy

insertion also occurs in the middle of the segment. The mites are large round bodies (pure white in spirit specimens) of such a size that only two can fit side by side either on the dorsal or ventral parts of the segments and their length is about half that of the larger segments. Several additional specimens of *A. cunabulanus* (Ben Lomond, Ragged Jack Saddle, 26:i:1948, N. J. B. Plomley; and Walls of Jerusalem, —:i:1948, F. Smithies) reveal similar mite infestations which in the dried condition retain their natural bright red colour.

Aedes (Ochlerotatus) flavifrons (Skuse)

See Edwards (1924—as *vandema*) and Mackerras (1927). Also taken at Low Head, 2:i:1946. Present in the C.S.I.R. Museum from Eaglehawk Neck, 22:xi:1922, and Geeveston, 7:xii:1922 (both A. Tonnoir).

Aedes (Ochlerotatus) luteifemur Edwards

See Edwards (1926) and Mackerras (1927). No additional data.

Aedes (Ochlerotatus) macleayanus Mackerras

There is no further information other than that in Mackerras (1927). It would be of interest to rediscover both this and the following species.

Aedes (Ochlerotatus) nigrithorax (Macquart)

See Mackerras (1927). No further data available.

Aedes (Ochlerotatus) nivalis Edwards

See Edwards (1924—as *australis*—1926) and Mackerras (1927). An additional record is Great Lake, 12:i:1946.

Aedes (Ochlerotatus) purpureiventris Edwards

See Edwards (1926). This species has not since been retaken.

Aedes (Ochlerotatus) tasmaniensis (Taylor)

The original description (Taylor, 1914) comprises all that is known of this species.

Aedes (Ochlerotatus) rubrithorax (Macquart)

Although originally described as a Tasmanian species, there is some doubt as to this (see Mackerras, 1927).

Aedes (Finlaya) alboannulatus (Macquart)

Recorded from Tasmania by Edwards (1926). See also Edwards (1924).

Aedes (Finlaya) notoscriptus (Skuse)

This species has not previously been recorded from Tasmania but has now been taken at Low Head, 22:ii:1946, 4:iii:1946 and 18:iii:1946. See also Edwards (1924).

Aedes (Finlaya) occidentalis (Skuse)

This species was recorded by Edwards (1924) from Tasmania.

Aedes (Pseudoskusea) concolor (Taylor)

This species is now recorded from Low Head, 25:ii:1946, 2:iii:1946 and 16:iii:1946. See also Edwards (1926).

Aedes (Pseudoskusea) crucians (Walker)

This species is only known from Tasmania (see Edwards, 1924).

Culex (Neoculex) fergusoni (Taylor)

No species of the genus *Culex* have previously been recorded from Tasmania. Whether the common domestic species *C. fatigans* is actually absent would be interesting to determine but I am not aware of its occurrence there. *C. fergusoni* was taken at Low Head, 20:ii:1946.

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